

IN THE ABSTRACT

ABSTRACT OF THE INVENTION

a1
A laminated ultrasonic waveguide and a method of fabrication thereof ~~which~~
~~comprises including~~ stamping at least two pieces of sheet stock to form stamped parts of
the laminated ultrasonic waveguide. The stamped parts are then laminated together to
form a laminated ultrasonic waveguide for transferring ultrasonic acoustic energy along a
longitudinal axis of the laminated ultrasonic waveguide. ~~In several disclosed~~
~~embodiments, the~~ The laminated ultrasonic waveguide ~~is~~ may be part of an ultrasonic
surgical instrument having an active tip end-effector, which is placed in contact with
tissue of a patient to couple ultrasonic energy transferred along the laminated ultrasonic
waveguide to the tissue. The stamped pieces of sheet stock can also be stamped to form
one or more channels extending along the length of the laminated ultrasonic waveguide.
The laminated ultrasonic waveguide can also define a connector at a proximal end thereof
to transfer ultrasonic energy into the laminated ultrasonic waveguide. In different
embodiments, the laminated ultrasonic waveguide comprises first and second (and third
or more) stamped pieces of sheet stock ~~which~~ that are laminated together.